

Amendments to the Specification

Please amend the specification as follows:

Please replace the paragraph located at page 4, lines 2-15 with the following paragraph:

The term line defect or line-like defect is a meaningful term within the practice of the present invention. There are many different types of defects, ranging from dropouts (single pixel defects or failures), color shifts, fading, actual damage to an original figure, etc. No single process sequence can address all of the forms of defects or damage, so individual systems, software, and processes must be devised to address the different defects. Line or line-type defects constitute defects or image damage that is defined as a series of attached or adjacent points that extends over a distance comprising at least a multiple number of pixels (e.g., at least 2, at least 4, at least 6, at least 10, at least 14 pixels), and defining even macroscopic dimensions and visible distances (e.g., at least 1 mm, at least 2 mm, at least 3 mm, at least 5 mm and more) in which there is damage in the image or defects in the data of the image. The 'line' or 'line-type' defect does not have to be a perfectly straight line, but may be jagged, curvilinear, discontinuous or the like. A line may be generally assumed to have a dimension of width that is small (less than 5%, less than 3%, and even less than 1%) of the largest dimension of the image.

Please replace the paragraph located at page 7, lines 16-26 with the following paragraph:

A co-pending U.S. Patent application, Serial No. 09/897,736, bearing attorney's docket number 1202.018US1 and being entitled DETECTION OF LINES IN IMAGES, discloses a local radial angular transform utilizing a hexagonal structure, termed a hexon, that is overlaid over the pixels of the image. Procedures for performing this overlay are described in detail in the co-pending application, which is incorporated herein by reference in its entirety. The hexon consists of a central group of pixels surrounded by six groups of pixels arranged in approximate hexagonal symmetry about the central group. Figure 1 of this application shows two orientations of one such hexagonal arrangement of pixel groups. Figure 2 shows a different arrangement of pixel groups in which the groups

do not touch. Figure 3 shows a similar arrangement to that of Figure 2 but with larger pixel groups.

Please replace the paragraph located at page 10, lines 13-21 with the following paragraph:

Additionally, when a straight or curved line segment of specified width has been detected it is possible to count the number of pixels in the line segment. By division of the pixel count by the line width it is possible to approximately estimate the length of the line segment. Accordingly, line segments can be selected according to length, for example by requiring the length to fall between two thresholds. Further, by means of suitable choices of hexon as disclosed in co-pending U.S. Patent application, Serial No. 09/897,736, bearing attorney's docket number 1202.018US1 and being entitled DETECTION OF LINES IN IMAGES. For example, a hexon of non-contiguous groups as shown in Figure 2, it is possible to detect lines with periodic spacing such as dashed lines.

Please replace the paragraph located at page 13, lines 5-10 with the following paragraph:

The size of the pixels groups making up the hexon and the size and form of the hexon itself may be chosen over wide limits as described in the above-identified co-pending U.S. Patent Application bearing attorney's docket number 1202.018US1. The image may be analyzed with one or more kinds of hexon with identical or different choices for the aforementioned thresholds. Output of the different hexons may be analyzed independently or jointly, optionally in a hierarchy with respect to scale.